

volume has been collected, whereupon the process is terminated. Such a volume can be about 50 ml for a buffy coat volume of 500 ml. When such a volume has been collected it has been determined that the stem cell suspension is optimally enriched. There is no possibility to determine when the stem cells are followed by red blood cells, erythrocytes, since there is no significant color difference between these two types of cells.

During the process of obtaining stem cells it is of great importance not to use too high an outlet flow, since this flow will disturb the separation in the processing bag. A higher outlet flow can be used in the initial flow of transparent fraction since this fraction is discarded. Of course, it is possible to first collect the platelet enriched fraction, then discard the leucocyte fraction, and finally collect the stem cell fraction. This operation will require three collection bags.

Of course, it is convenient to use the spare material at the middle of the annular processing bag for forming the collection bag for the leukocyte fraction, since it is otherwise only discarded. The material in the collection bags is determined according to the intended use and is any conventional material used for such purpose. The material in the processing bag is PVC or similar material.

The invention has been described above with reference to specific embodiments of the invention. However, the different features of the embodiments can be combined in different manners and such combinations should be included within the scope of the invention. The invention is only limited by the appended patent claims.